

1 **CLAIMS**

2 1. A method, comprising:

3 detecting a request for information (RFI) initiated by a user while accessing

4 a content program;

5 transmitting RFI data to a server on a broadcast network; and

6 wherein the RFI data includes:

7 a time at which the RFI was initiated;

8 a channel accessed at the time the RFI was initiated; and

9 closed caption data associated with the content program that  
10 occurred prior to and including the time at which the RFI was initiated.

11  
12 2. The method as recited in claim 1, wherein the closed caption data  
13 further comprises a predefined amount of closed caption data.

14  
15 3. The method as recited in claim 2, wherein the amount of closed  
16 caption data further comprises a number of seconds of closed caption data.

17  
18 4. The method as recited in claim 3, wherein the number seconds of  
19 closed caption data further comprises ten seconds or less.

20  
21 5. The method as recited in claim 2, wherein the amount of closed  
22 caption data further comprises a number of bytes of closed caption data.

1           6. The method as recited in claim 1, further comprising receiving a  
2 system message from the server in response to the transmission of the RFI data.

3  
4           7. The method as recited in claim 6, further comprising displaying the  
5 system message to the user.

6  
7           8. The method as recited in claim 7, wherein the displaying step occurs  
8 in response to a prompt from the user to display the system message.

9  
10          9. The method as recited in claim 7, further comprising storing the  
11 system message in memory until prompted to display the system message.

12  
13          10. The method as recited in claim 1, wherein the request for  
14 information is initiated by a single button actuation.

15  
16          11. The method as recited in claim 1, wherein the content program is  
17 one of the following types of content program: video, audio, audio/visual,  
18 multimedia.

19  
20          12. A method, comprising:  
21 receiving request for information (RFI) data from a client device on a  
22 content broadcasting network, the RFI data indicating that a client device user has  
23 requested information about a content item accessed by the client device when a  
24 request for information was initiated;  
25 determining if the content item is a content program or an advertisement;

1 identifying a content program title associated with the content program if  
2 the content item is a content program;

3 identifying an advertiser associated with the advertisement if the content  
4 item is an advertisement;

5 performing an action specified for the identified content item; and

6 wherein the RFI data includes at least a time at which the RFI was initiated  
7 and a channel accessed at the time the RFI was initiated.

8  
9 **13.** The method as recited in claim 12, wherein the performing an action  
10 further comprises sending information to the user, the information being related to  
11 the content item.

12  
13 **14.** The method as recited in claim 12, wherein the performing an action  
14 further comprises sending user information to an entity associated with the content  
15 item so that the entity can provide information related to the content item to the  
16 user.

17  
18 **15.** The method as recited in claim 12, wherein the determining if the  
19 content item is a program or an advertisement further comprises cross-referencing  
20 the time at which the request for information was initiated with content item time  
21 code data to determine whether a program or an advertisement was scheduled at  
22 the time the request for information was initiated.

1           **16.**    The method as recited in claim 12, wherein:  
2           the RFI data further comprises closed caption data associated with the  
3           content program that occurred prior to and including the time at which the RFI  
4           was initiated; and

5           the determining if the content item is a program or an advertisement further  
6           comprises:

7                    using the closed caption data to derive search terms;

8                    searching a reference database using the search terms; and

9                    determining from matches derived from the search to determine if  
10           the content item is a program or an advertisement.

11  
12           **17.**    The method as recited in claim 16, wherein the reference database  
13           further comprises keywords, one or more keywords being associated with one or  
14           more content items.

15  
16           **18.**    The method as recited in claim 16, wherein the reference database  
17           further comprises scripts of content items that can be compared with the search  
18           terms.

19  
20           **19.**    The method as recited in claim 16, wherein the identifying an  
21           advertiser further comprises:

22                    comparing the closed caption data to advertiser keywords; and

23                    identifying an advertiser from one or more matches derived from the  
24           search.

1  
2       **20.**    The method as recited in claim 12, wherein the identifying a  
3 program title further comprises:

4           identifying which of several programs was broadcast on the channel  
5 identified in the RFI data at the time identified in the RFI data; and  
6           identifying a title associated with the identified program.

7  
8       **21.**    The method as recited in claim 12, wherein:  
9           the RFI data further comprises closed caption data associated with the  
10 content program that occurred prior to and including the time at which the RFI  
11 was initiated; and

12          the identifying an advertiser further comprises:

13                deriving one or more search terms from the closed caption data; and  
14                searching an advertiser information database to identify and  
15 advertiser.

16  
17       **22.**    A client device, comprising:  
18           a processor;  
19           memory;  
20           at least one channel tuner;  
21           input means for accepting user input;  
22           a closed caption buffer configured to store a predefined amount of latest  
23 available closed caption data;

1 a request for information application configured to receive and identify a  
2 request for information input from a user and transmit request for information data  
3 to a server; and

4 wherein the request for information data includes a channel identifier that  
5 identifies a channel tuned to by the channel tuner at the time the request for  
6 information was received, a time stamp that identifies a time that the request for  
7 information was received, and closed caption data contained in the closed caption  
8 buffer.

9  
10 **23.** The client device as recited in claim 22, further comprising a  
11 channel identifier configured to identify a broadcast channel accessed by the  
12 channel tuner.

13  
14 **24.** The client device as recited in claim 22, further comprising a time  
15 stamp module configured to identify a time at which user input is received.

16  
17 **25.** The client device as recited in claim 22, further comprising a closed  
18 caption application configured to receive a closed caption signal from a server and  
19 display closed caption information with content being shown on a display.

20  
21 **26.** The client device as recited in claim 22, wherein the input means  
22 further comprises a button that, when actuated by the user, enters the request for  
23 information.

1           **27.**    The client device as recited in claim 22, wherein the closed caption  
2 buffer contains a predefined number of seconds of closed caption data that  
3 occurred prior to the request for information.

4  
5           **28.**    The client device as recited in claim 22, wherein the closed caption  
6 buffer contains a predefined number of bytes of closed caption data that occurred  
7 prior to the request for information.

8  
9           **29.**    The client device as recited in claim 22, wherein the client  
10 information further comprises information necessary to sufficiently identify a  
11 subscriber associated with the client device so that information may be sent to the  
12 subscriber by one or more delivery modes.

13  
14           **30.**    The client device as recited in claim 22, further comprising:  
15           messaging means for receiving a system message from the server; and  
16           display means for displaying the system message.

17  
18           **31.**    A broadcast network server, comprising:  
19           electronic program guide data that provides program information and  
20 scheduling information for a plurality of content items available on a broadcast  
21 network;

22           a response module configured to receive a request for information from a  
23 network client containing closed caption data associated with a selected content  
24 item accessed at the network client at a time when a client user entered a request  
25 for information;

1 a search program configured to perform a search using search terms derived  
2 from the closed caption data to determine a sponsor associated with the selected  
3 content item;

4 a rules module configured to associated a rule with a sponsor associated  
5 with the selected content item; and

6 wherein the response module is further configured to execute an action  
7 specified by the rules module.

8  
9 **32.** The broadcast network server as recited in claim 31, further  
10 comprising:

11 a program information module;

12 an advertisement information module; and

13 wherein:

14 the response module is further configured to determine whether the request  
15 for information was entered during a program or during an advertisement; and

16 the search module is further configured to search the program information  
17 module if the request for information was entered during a program, and to search  
18 the advertiser information module if the request for information was entered  
19 during an advertisement.

20  
21 **33.** The broadcast network server as recited in claim 32, wherein the  
22 program information module contains at least of portion of a script of one or more  
23 content items available on the broadcast network.



1           **34.**    The broadcast network server as recited in claim 32, wherein the  
2 advertiser information module contains at least of portion of a script of one or  
3 more advertisements during broadcasts available on the broadcast network.

4  
5           **35.**    The broadcast network server as recited in claim 31, further  
6 comprising a keywords module; and wherein

7           the search module is further configured to search the keywords module  
8 with the search terms derived from the closed caption data; and

9           the response module is further configured to determine whether the request  
10 for information was entered during a program or during an advertisement from  
11 search results.

12  
13           **36.**    The broadcast network server as recited in claim 31, wherein the  
14 action further comprises one or more actions selected from the following list of  
15 actions: system message; e-mail message; post mailing.

16  
17           **37.**    The broadcast network server as recited in claim 31, further  
18 comprising a client information module that contains information about how to  
19 contact a subscriber associated with the network client; and wherein the action  
20 further comprises transmitting client information related to the network client from  
21 which the request for information was received to the sponsor.

1           **38.**   The broadcast network server as recited in claim 31, further  
2 comprising a program information module that stores information available for  
3 content items available on the broadcast network; and wherein the action further  
4 comprises sending information available for the selected content item to the  
5 network client.

6  
7           **39.**   One or more computer-readable media including computer-  
8 executable instructions that, when executed on a computer, perform the following  
9 steps:

10           recognizing a user input as a user request to receive information about a  
11 content item that the user is viewing on a broadcast network channel;

12           transmitting closed caption data associated with the content item to a  
13 network server, the closed caption data contemporarily corresponding to the user  
14 input; and

15           wherein the closed caption data includes sufficient data from which a  
16 context of the content item at a time of the user input can be determined.

17  
18           **40.**   The one or more computer-readable media as recited in claim 39,  
19 further comprising:

20           receiving a response to the request for information; and

21           wherein the response includes information about the context of the content  
22 item at the time of the user input.

1           **41.**    The one or more computer-readable media as recited in claim 39,  
2 further comprising:

3           transmitting a time at which the user input was entered; and  
4           transmitting a channel that was being viewed at the time the user input was  
5 entered.

6  
7           **42.**    One or more computer-readable media including computer-  
8 executable instructions that, when executed on a computer, perform the following  
9 steps:

10          receiving request for information data from a client connected to a  
11 broadcast network, the request for information data including closed caption data  
12 that is associated with a content item viewed at the client at the time a request for  
13 information was input by a user;

14          analyzing the closed caption data to determine if the request for information  
15 was input during a program or during an advertisement, and to determine a  
16 sponsor associated with the program or advertisement;

17          determining an action to take depending on the sponsor determination; and  
18 performing the action.

19  
20          **43.**    The one or more computer-readable media as recited in claim 42,  
21 wherein the performing an action further comprises sending user-identifying  
22 information to the sponsor that the sponsor can use to send information to the user.

1           **44.**    The one or more computer-readable media as recited in claim 42,  
2 wherein the performing an action further comprises sending information related to  
3 the sponsor to the user.

4  
5           **45.**    The one or more computer-readable media as recited in claim 42,  
6 wherein the performing an action further comprises sending a system message to  
7 the user.

8  
9           **46.**    The one or more computer-readable media as recited in claim 42,  
10 wherein the performing an action further comprises sending an e-mail message to  
11 the user.

12  
13           **47.**    The one or more computer-readable media as recited in claim 42,  
14 wherein the performing an action further comprises sending information via post  
15 to the user.

16  
17           **48.**    The one or more computer-readable media as recited in claim 42,  
18 wherein the analyzing the closed caption data to determine if the request for  
19 information was input during a program or during an advertisement further  
20 comprises:

21           searching a plurality of keywords using search terms derived from the  
22 closed caption data; and

23           determining if the request for information was input during a program or  
24 during an advertisement from matches generated by the search.

1  
2       **49.**    The one or more computer-readable media as recited in claim 42,  
3 wherein the analyzing the closed caption data to determine if the request for  
4 information was input during a program or during an advertisement further  
5 comprises:

6           searching text databases corresponding to a plurality of content items using  
7 search terms derived from the closed caption data; and

8           determining if the request for information was input during a program or  
9 during an advertisement from matches generated by the search.

10  
11       **50.**    The one or more computer-readable media as recited in claim 42,  
12 wherein the sponsor further comprises a program producer or an advertiser.

13  
14       **51.**    One or more computer-readable media including computer-  
15 executable instructions that, when executed on a computer, perform the following  
16 steps:

17           receiving request for information data from a client connected to a  
18 broadcast network, the request for information data including a time stamp that is  
19 associated with a content item viewed at the client at the time a request for  
20 information was input by a user;

21           comparing the time stamp to content time code information to determine if  
22 the request for information was input during a program or during an  
23 advertisement, and to determine a sponsor associated with the program or  
24 advertisement;

25           determining an action to take depending on the sponsor determination; and

1 performing the action.

2  
3 **52.** The one or more computer-readable media as recited in claim 42,  
4 wherein the performing an action further comprises sending user-identifying  
5 information to the sponsor that the sponsor can use to send information to the user.  
6

7 **53.** The one or more computer-readable media as recited in claim 42,  
8 wherein the performing an action further comprises sending information related to  
9 the sponsor to the user.  
10

11 **54.** The one or more computer-readable media as recited in claim 42,  
12 wherein the performing an action further comprises sending a system message to  
13 the user.  
14

15 **55.** The one or more computer-readable media as recited in claim 42,  
16 wherein the performing an action further comprises sending an e-mail message to  
17 the user.  
18

19 **56.** The one or more computer-readable media as recited in claim 42,  
20 wherein the performing an action further comprises sending information via post  
21 to the user.  
22  
23  
24  
25

1           57.    The one or more computer-readable media as recited in claim 42,  
2 wherein the analyzing the closed caption data to determine if the request for  
3 information was input during a program or during an advertisement further  
4 comprises:

5           searching a plurality of keywords using search terms derived from the  
6 closed caption data; and

7           determining if the request for information was input during a program or  
8 during an advertisement from matches generated by the search.

9  
10  
11           58.    The one or more computer-readable media as recited in claim 42,  
12 wherein the analyzing the closed caption data to determine if the request for  
13 information was input during a program or during an advertisement further  
14 comprises:

15           searching text databases corresponding to a plurality of content items using  
16 search terms derived from the closed caption data; and

17           determining if the request for information was input during a program or  
18 during an advertisement from matches generated by the search.

19  
20           59.    The one or more computer-readable media as recited in claim 42,  
21 wherein the sponsor further comprises a program producer or an advertiser.  
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23  
24  
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